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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,354	09/25/2003	Randall Dale Ristau	TRMB1398	3049

7590 06/23/2005

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EXAMINER

MILLER, CRAIG S

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

57

Office Action Summary

Application No.

10/672,354

Applicant(s)

RISTAU ET AL.

Examiner

Craig Miller

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

2. Claims 1-20 are rejected under 35 U.S.C. 103 as being unpatentable over Anderson (5,922,041 B1).

Anderson discloses feeding known good GPS data to a GPS receiver for test purposes and comparing the result of the processing of the test signals to the expected good results. Anderson does not suggest that the test data source be integrated with the GPS receiver. Because the use of external GPS test signal equipment is known and because it is known in general to integrate that which was known separately, In re Larson, 144 USPQ 347 (CCPA 1965), “*Although it is true that invention may be present under some circumstances in making integral that which was separate before, we do not feel that such is the case here. Improved results only will not take the case out of the general rule. There is also a requirement that the unification or integration involves more than mere mechanical skill. In re Murray*, 19 CCPA (Patents) 739, 53 F.2d 541, 11 USPQ 155; *In re Zabel et al.*, 38 CCPA (Patents) 832, 186 F.2d 735, 88 USPQ 367.”, it would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate known external GPS test functions within a conventional GPS receiver so as to receive the expected benefits derived there from such as ease of use and enhanced system flexibility absent a showing of unexpected results or synergistic effect from any particular claimed combination.

More particularly with respect to claims 2 and 4, Clark discloses a GPS simulator [46] which generates GPS message format signals.

More particularly with respect to claims 5, 6, 11 and 13, said claims are directed towards well known conventional GPS modulation codes. Because the device of Anderson discloses modulating a GPS signal using GPS codes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Anderson such known modulation codes so as to enable testing the GPS receiver under real world situations as suggested by Anderson in the top of column 2 and so as to receive the expected benefits derived there from such as enhanced system reliability absent a showing of unexpected results or synergistic effect from any particular claimed combination.

More particularly with respect to claims 7, 9 and 11, said claims are directed towards well known signal transfer means. Because the device of Anderson discloses feeding a GPS signal to a GPS receiver input (col. 2 line 4), and because rf couplers and rf selective switches are well known within the GPS receiver art for transporting rf signals and because Anderson as modified above necessarily requires both a signal path to real world GPS satellite signals and the simulated GPS signals, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Anderson as modified above such known rf transport path means so as to enable testing the GPS receiver under real world situations as suggested by Anderson in the top of column 2 and so as to receive the expected benefits derived there from such as enhanced system resistance to outside rf interference absent a showing of unexpected results or synergistic effect from any particular claimed combination.

More particularly with respect to claims 15-17, said claims are directed towards introducing a second carrier with an optionally different frequency. Because the device of Anderson discloses that the GPS signals should simulate real-world data (top of col. 2), and because Doppler shifts and phase shifts are well known signal flaws for GPS receivers, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Anderson as modified above such known signal anomalies as suggested by Anderson in the top of column 2 and so as to receive the expected benefits derived there from such as enhanced system resistance to GPS signal anomalies absent a showing of unexpected results or synergistic effect from any particular claimed combination.

3. The prior art made of record but not relied upon is deemed pertinent to applicant's disclosure.

Fontes *et al.* (6,114,989) discloses a device for recording and playing back GPS data.

Maynard (6,466,846 B2) discloses determining position integrity within a GPS receiver.

Gaal (6,760,582 B2) discloses testing GPS enabled mobile phones.

Clark (6,782,330 B1) discloses GPS satellite self diagnostics including GPS data feedback.

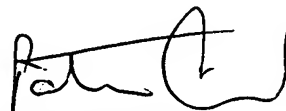
Kang *et al.* (Prepub. US 2004/0093135 A1) discloses testing GPS enabled mobile phones.

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (571) 272-2219. Central facsimile services are now available at (703) 872-9306.

The Examiner can normally be reached on Mondays through Thursdays from 6:40am-2:10pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (571) 272-2216.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Private PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Craig Steven Miller (ss)
20 June 2005



PATRICK ASSOUD
PRIMARY EXAMINER